

VT Center for Geographic Information

VT Open Geodata Portal: Tagging Standard

Version 1.3 DRAFT



Vermont Center for Geographic Information

Updates

Date	Notes
06/26/2016	Draft 1.0
08/17/2016	Draft 1.1 – presented to VT GIS Community for 30-day public comment period
10/12/2016	Approved by VT Enterprise GIS Consortium (EGC) representatives via a voice vote at 10/12/2016 meeting.
07/31/2018	Draft 1.2
09/12/2018	Approved by VT Enterprise GIS Consortium (EGC) representatives via a vote at 09/12/2018 meeting.
02/06/2023	Draft 1.3. NODES domain updated to reflect: <ul style="list-style-type: none"> • name change of Southern Windsor County Regional Planning Commission (SWCRPC) to Mount Ascutney Regional Commission (MARC), • presence of Vermont Agency of Human Services (AHS), • and presence of Vermont Public Service Department (VTPSD).

Statutory Authority and Standard Review/Approval

The Vermont Center for Geographic Information (VCGI) has the statutory authority to craft and adopt VT GIS standards and guidelines. Over more than 2 decades, VCGI has worked with the VT GIS community to carefully craft these standards and guidelines, helping to ensure that Vermont GIS (VGIS) data “is compatible with, useful to” others in the VT GIS community.

The State’s Enterprise GIS Consortium (EGC) has been established as the organization responsible for reviewing and approving Vermont GIS standards crafted by VCGI (in collaboration with the Vermont GIS Community).

Purpose

The purpose of this Tagging Standard is to establish a tagging framework that yields consistently positive user and publisher experiences with Vermont’s Open Geodata Portal in terms of data searching, data discovery, portal organization, and portal-content presentation.

Guiding Principles

The 3 guiding principles of the VT Open Geodata Portal Tagging Standard are:

- **Consistency** – Tags are consistently utilized in the same manner.
- **Query Needs** – Tags support quintessential user queries, item organization, and portal-content presentation in the Vermont Open Geodata Portal.
- **Extensibility** – Additional tags can be added to serve particular needs.

Tagging Standard

The VT Open Geodata Portal Tagging Standard is defined and described by the following 2 components; those 2 components are a Tagging Standard Framework and a set of Tagging Standard Domains.

Tagging Standard Framework

- All items catalogued in Vermont's Open Geodata Portal are given tags in ArcGIS Online per the following table.
- Descriptions within "< >" represent variable content.
- Domain names are represented by "{ }" and correspond to domains that are defined in the [Tagging Standard Domains](#) section.
- " | " represents mutually exclusive options (choose 1).
- Specifications in the Tag Format column are case sensitive. Many tags have a camel-case format (camelCase), where the first portion represents a certain attribute name in all lowercase characters and the second portion represents the attribute value with the first character in uppercase followed by lowercase and/or uppercase characters.
- Tags that begin with attribute names, such as a tag of the **isotheme** tag type, are primarily intended for back-end publisher-driven queries (such as category collations) while other tags are primarily intended for user-driven keyword searches.

Tag Type Name	Tag Required or Optional	Tag Format	Quantity	Description	Examples
isotheme	Required	isotheme <{ ISO THEMES }>	1...n	The isotheme tag assigns an item to a theme that is based on ISO 19115 themes. The isotheme tag's primary purpose is provision of consistent theme-based item collation.	isotheme Elevation isotheme Emergency
subtheme	Required	subtheme <{ SUB THEMES }>	1...n	The subtheme tag assigns an item to a sub-theme that is based on ISO 19115 themes. The subtheme tag's primary purpose is provision of consistent theme-based item collation.	subtheme DEM subtheme Flood
node	Required	node <{ NODES } <i>Node</i> *> <small>*If Node is not included in NODES domain. First character must be in uppercase.</small>	1	A node-based name of the venue from which the item is catalogued. In short-string/abbreviated form.	node CVRPC node VCGI node VTANR
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Tag Type Name	Tag Required or Optional	Tag Format	Quantity	Description	Examples
keyword	Required	<i>keyword</i>	1...n	<p>Some other tag types that are used with camelCase formats which begin with attribute name strings (for example, the isotheme tag) can be reflected in keyword tags without the attribute-name strings to support user-driven searches. For example, a subtheme tag “subthemeE911” might be reflected as a keyword tag “E911”. Keyword tags can reflect keywords which are listed in metadata. Additional keyword tags can be included as needed to support user-driven searches and publisher administration.</p>	Facilities Schools college university education campuses
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Tag Type Name	Tag Required or Optional	Tag Format	Quantity	Description	Examples
itemtype	IF item is a web service, a web app, or a mobile app, tag is Required. Otherwise, it is Optional.	itemtype <{ ITEM TYPES }>	1...n	The itemtype tag describes the item's type (web service, web app, pre-packaged .zip, etc.). The itemtype tag type supports listings of web services, web apps, mobile apps, etc. NOTE: It is possible for an item to have multiple types.	itemtype WebService itemtype ZIP itemtype WebApp
datayear	Optional	datayear <YYYY*> *YYYY represents year. Primarily for aerial imagery.	1...n	The datayear tag is primarily for aerial imagery. It presents the year in which the data was collected.	datayear 2012 datayear 1999
newness	Optional	newness <New Updated>	1	The newness tag can be used to flag an item as being new or recently updated.	newness New newness Updated
updated	Optional	updated <YYYYMMDD*> *Can be only year (YYYY), year+month (YYYYMM), or year+month+day (YYYYMMDD).	1	The updated tag represents date on which the data was updated.	updated 20180731 updated 2018
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Tag Type Name	Tag Required or Optional	Tag Format	Quantity	Description	Examples
topic	Optional	topic <{ TOPICS } <i>Topic</i> *> *If Topic is not included in TOPICS domain. First character must be in uppercase. No empty spaces in the string.	1...n	The topic tag can be used to group items by topics that overlap one or more thematic categories. Topic tags provide alternative ways for collating items.	topic Energy topic EnergyPlanning topic HistoricImagery topic TropicalStormIrene
dataset	Optional	dataset < <i>Dataset name</i> *> *First character must be in uppercase.	1	The dataset tag is used to identify or retrieve all layers that are related to a particular dataset. For example, in an organization's geodatabase, a feature dataset might store multiple feature classes that are served through Vermont's Open Geodata Portal; the dataset tag can be used to tie those feature classes together.	dataset BoundaryOther_BNDHASH dataset WaterHydro_VHDCARTO

Tagging Standard Domains

Domain	Description	Array
ISO_THEMES	The ISO_THEMES domain contains an array of themes that are based on ISO 19115 themes.	Boundary Farm Climate Basemap Ecologic Cadastral Demo Econ Land Elevation Emergency* Environ Facilities Water Geodetic Geologic Health Imagery Ocean Tourism Trans Utility
SUB_THEMES	The SUB_THEMES domain contains an array of sub-themes that are based on ISO 19115 themes. Use of the SUB_THEMES domain is contingent on use of 1 of the item's isotheme tags.	If isotheme tag = Boundary: County Region State Town Tile Other

Domain	Description	Array
		<p>If isotheme tag = Farm: Land Stats Other</p> <p>If isotheme tag = Climate: Precip Temp Other</p> <p>If isotheme tag = Basemap: Landmarks Charts Scanmaps Other</p> <p>If isotheme tag = Ecologic: Fauna Flora Habitat Stats Other</p> <p>If isotheme tag = Cadastral: Conserved Parcels Publands Other</p> <p>If isotheme tag = Demo: Farm Archeo Economic Education Historical</p>

Domain	Description	Array
		<p>Housing</p> <p>Natres</p> <p>Health</p> <p>Trans</p> <p>Census</p> <p>Other</p> <p>If isotheme tag = Econ:</p> <p>Stats</p> <p>Other</p> <p>If isotheme tag = Land:</p> <p>Landuse</p> <p>Landcov</p> <p>Other</p> <p>If isotheme tag = Elevation:</p> <p>Contours</p> <p>DEM</p> <p>Lidar</p> <p>Slope</p> <p>Other</p> <p>If isotheme tag = Emergency*:</p> <p>E911</p> <p>Flood</p> <p>Hazards</p> <p>Other</p> <p>If isotheme tag = Environ:</p> <p>Pollution</p> <p>Hazmat</p> <p>Mangareas</p> <p>SPA</p> <p>Other</p>

Domain	Description	Array
		<p>If isotheme tag = Facilities: Buildings Hospitals Schools Other</p> <p>If isotheme tag = Water: Hydro Wetlands Other</p> <p>If isotheme tag = Geodetic: Benchmark Other</p> <p>If isotheme tag = Geologic: Bedrock Surficial Soils Other</p> <p>If isotheme tag = Health: Stats Other</p> <p>If isotheme tag = Imagery: Photos Satellite Other</p> <p>If isotheme tag = Ocean: Fauna Flora Habitat Other</p> <p>If isotheme tag = Tourism:</p>

Domain	Description	Array
		Recreation Trails Other If isotheme tag = Trans: Air Marine Pedestrian Rail Road Stats Structures Other If isotheme tag = Utility: Power Transmit Telecom Other
ITEM_TYPES	The ITEM_TYPES domain contains item types.	Webservice ZIP WebApp MobileApp DesktopTool Script Offline
NODES	The NODES domain contains names of venues from which items are catalogued. The names are in short-string/abbreviated form. AHS represents Vermont Agency of Human Services, VTDPS represents Vermont Department of Public Safety, and VTPSD represents Vermont Public Service Department.	ACRPC AHS BCRC CCRPC CVRPC LCPC

Domain	Description	Array
		MARC NRPC NVDA RRPC TRORC UVM VCGI VTACCD VTANR VTDPS VTE911 VTPSD VTrans WRC
TOPICS	The TOPICS domain contains topics that span 1 or more thematic categories.	topicEnergy topicEnergyPlanning topicHistoricImagery topicTropicalStormIrene topicClimateChange topicEconomicGrowth topicAffordability

*The "Emergency" ISO_THEMES item was created by VCGI. It isn't part of the ISO 19115 standard.